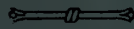


DOCKING
RURAL DISTRICT COUNCIL



ANNUAL REPORT

of the

Medical Officer of Health

for the year 1960

to which is appended the

Report of the

SENIOR

PUBLIC HEALTH INSPECTOR

and the

Report of the

WATERWORKS SUPERINTENDENT



CONTENTS.

<u>The Staff of the Public Health Department</u>	p. 1.
<u>The Public Health Committee</u>	p. 2.
<u>Preface</u>	p. 3.
<u>Part I - The Report of the Medical Officer of Health</u>	
- <u>General</u>	p. 4 - 12
Staff	p. 4
Area & Population.	p. 4
Meteorological Factors	p. 4.
Vital Statistics	p. 4 - 6.
Communicable Diseases	p. 7 - 11
Environmental Hygiene	p. 11 - 12
<u>Appendix A - Climatic Data</u>	p. 13
<u>Appendix B - Causes of Death</u>	p. 14
<u>Appendix C - Water Tests - Bacteriological</u> ...	p. 15
<u>Appendix D - Factories Acts 1937-59</u>	p. 16
<u>Part II - The Report of the Senior Public Health Inspector</u>	p. 17 - 23
Inspections & Visits	p. 18
Notices	p. 18
Housing	p. 19
Food Premises	p. 19
Food Hygiene Regulations	p. 20
Meat Inspection	p. 20
Other Environmental Factors	p. 21 - 23
<u>Part III - The Report of the Waterworks Superintendent</u>	p. 24 - 28

1.

DOCKING RURAL DISTRICT COUNCIL.

Public Health Department.

STAFF

Medical Officer of Health.

W.H. CRICHTON, C.I.E., M.B., Ch.B., D.P.H.

Senior Public Health Inspector

W.B. JENKINS, C.R.S.I., C.S.I.B.

First Additional Public Health Inspector.

G.W. SANGER, C.R.S.I., C.S.I.B.

Additional Public Health Inspectors.

B.J. KIRKHAM, C.R.S.I., C.S.I.B. to October 1960

E.R. MACHIN, C.R.S.I., C.S.I.B. from December 1960

Clerk (part-time)

Miss N.H. PULL

DOCKING RURAL DISTRICT COUNCIL.Public Health Committee.

1960

Chairman	-	Col. G.H. Winter
Vice-Chairman	-	Mrs. C. Clifton Brown, O.B.E.
Members	-	Rev. W.M. Abernethy Mrs. R.B. Allen Mr. B.T. Borthwick Mrs. K.W. Craske Mr. W.G. Cunningham Mr. T. Goulding Mr. E.H. Jennings Mr. M. Jones Mr. E.E. Lack, J.P. Mr. W.C. Leonard Mrs. P.S. Luffman Mr. H.H. Middleton Mr. L.A. Morris Mr. A.E. Richmond Mr. A.W. Ringer Mr. R.T. Rush Mrs. H.F. Sands, J.P. Mr. S.C. Steel Mr. E.J.F. Isherwood (ex-officio) Mr. J.E.A. Lambert, J.P. (ex-officio)

- PREFACE -

The Chairman & Members,
Docking Rural District Council.

Mr. Chairman, Ladies & Gentlemen,

Annual Public Health Report 1960.

It is with pleasure mingled with regret that I present to you this, my last annual public health report before my retirement.

As usual I have incorporated in the report, the reports of the Senior Public Health Inspector (Part II) and of the Waterworks Superintendent (Part III) to whom I am indebted for their contributions.

The Vital Statistics for the year 1960 show very little change except in the infant mortality rate which at 33.8 per 1,000 is an exceptionally high figure. It is the infant mortality rate which is generally accepted as an index of the health circumstances of an area and it may well be borne in mind in conjunction with the comment made on environmental hygiene in the substance of the report (p. 11).

A very striking feature of the infant deaths reported is that they all occurred among legitimate births and none among illegitimate births. This is a complete reversal of the picture which obtained as recently as a quarter of a century ago and bears excellent witness to the services provided by the State for the unmarried mother and her child.

In the section on Communicable Diseases two important features are worthy of attention - first, the low general incidence of infectious disease; and second, the very appreciable increase in all the protective immunisations provided through the County Health Services. The most striking progress was made in protection by immunisation against diphtheria, administered either singly or in combination with other antigens (i.e. tetanus & whooping cough) either in initial courses or, equally important, as boosters.

In polio. immunisation, over 3,000 more persons were immunised with three doses during the year and a most welcome sign is the increase in the late "teenage" and adolescent age groups.

Before taking final leave of the Council, I wish to take this opportunity of expressing to you my very great regret at leaving you and my most sincere gratitude to you for your unfailing support and encouragement.

I also wish to place on record my gratitude for the loyalty displayed to me and for the excellent work performed by the Staff of the Public Health Department and for the generous assistance rendered to me by the Clerk and administrative staff of the Council.

Your obedient Servant,

W.H. CRICHTON,

C.I.E., M.B., Ch.B., D.P.H. Medical Officer of Health.

PART I- General -

1. Staff - Mr. Kirkham resigned in October 1960 and Mr. Machin was appointed in the vacancy this created in December.

2. Area & Population -

The District covers 87,386 acres and comprises 30 parishes. It is essentially rural in character with, in addition, a wonderful coastline to west and north which annually attracts thousands of holiday makers who occupy every type of accommodation - hotels, caravans, camp sites, beach huts and lodgings.

The Registrar General's estimate of the mid year resident population of the District was 18,790, which is 280 higher than that of the preceding year and 600 higher than that of the year 1959.

The natural increase in the population i.e. the difference between the number of live births (325) and the number of deaths (223) is 102.

3. The Rateable value of the District is £146,395

4. The product of the 1d. Rate 1959 - 60 was £572

5. Meteorological Factors - The data, acquired by courtesy of the R.A.F. from West Raynham, are shown in Appendix A (p. 13). It will be noted that the rainfall in inches compared very favourably with that of the preceding year until the end of July. Then, perversely, when thousands of people set out on their summer holidays it poured during August & September and also in October & November. This depressed everybody and pleased nobody, not even the farmers who had complained so bitterly about the drought in 1959. The inclement weather and general depression may well have assisted in the spread and persistence of colds, coughs and even measles. The total rainfall in 1960 was 30.24 inches as against 21.40 in 1959.

- Vital Statistics -

1. Births - The number of live and still births which occurred in the District during 1960 are shown as follows:-

Live Births	Males	Females	Totals
Legitimate	167 (155)	147 (140)	314 (295)
Illegitimate	6 (8)	5 (3)	11 (11)
Totals	173 (163)	152 (143)	325 (306)
Still Births	Males	Females	Totals
Legitimate	4 (3)	2 (2)	6 (5)
Illegitimate	- (-)	- (-)	- (-)
Totals	4 (3)	2 (2)	6 (5)
Totals Live and Still Births	177 (166)	154 (145)	331 (311)

Figures in brackets relate to 1959.

Illegitimate Live Births - There were 11 illegitimate live births representing a percentage of 3.3% of the total live births compared with 3.59% in 1959 & 6.3% in 1958.

2. The Live Birth Rate - The crude live birth rate per 1,000 population is 17.2 compared with 16.5 per 1,000 in the preceding year. The live birth rates for the last five years was as follows:-

<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>
17.2	16.5	19.9	18.6	19.87

The corrected birth rate after application of the comparability factor is 18.9 compared with 18.15 in 1959 and with 17.1 for England & Wales during the year under review.

3. Still Births - As shown on the Table in Para. 1 there were 6 still births all of which occurred among legitimate infants. The still birth rate per 1,000 total live and still births was 18.1 as compared with 16.07 in the preceding year and 13.5 in 1958. The provisional still birth rate for England & Wales was 19.7.

4. Infant Deaths -

a) The number of deaths among children under one year of age was 11 (7 males, 4 females) compared with 6 in the preceding year. All were legitimate births.

The causes of death among infants under one year of age were as follows:-

Prematurity	5
Asphyxia from inhalation of vomitus	2
Gastro Enteritis	1
Intestinal obstruction (Congenital)	1
Congenital malformation & meningeal infection	1
Bilateral pneumonia	1

b) The infant mortality rate per 1,000 total live births was 33.8 compared with 19.6 in the preceding year. The infant mortality rates during the last five years were as follows:-

<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>
33.8	19.6	22	18.3	11.5

The infant mortality rate for England & Wales in 1960 was 21.7.

c) Legitimate infant deaths per 1,000 live births is again 33.8 as all occurred among legitimate children.

d) Illegitimate infant deaths - Nil.

e) Neonatal Mortality Rate i.e. infant deaths under 4 weeks per 1,000 total live births was 21.5, seven infants, 6 males and 1 female having died at that age. The neonatal mortality rate in the preceding year was 13.06.

f) Early neonatal Mortality Rate - i.e. deaths under 1 week per 1,000 total live births is the same as the neonatal mortality rate, all seven deaths having occurred under 1 week of age.

g) Perinatal Mortality Rate - i.e. Still births and deaths under 1 week combined per 1,000 total live and still births was 39.2 compared with 28.9 in the preceding year.

6. Maternal Mortality - There was one death which occurred in a young unmarried primipara aged 19 who died of postpartum haemorrhage.

The maternal mortality rate per 1,000 total live and still births was therefore 3.0

7. Deaths from all Causes -

a) The total number of deaths at all ages as recorded by the Registrar General was 223 (112 males; 111 females) as compared with 215 (90 males; 125 females) in the preceding year. The causes of death are shown in Table at Appendix B (page 14).

There are few major differences in the distribution of causes of death, the most notable being the case of maternal mortality referred to on page 5 , a general increase in the number of deaths from vascular lesions of the nervous system, The small increase in the number of deaths from Leukaemia; the fact that the majority of cases of death from cancer of the lung occurred among men.

Most of those who died of disease lived to a ripe old age whatever the cause, one indeed died at 103 as a result of prostatic trouble and it may comfort some people to know that a man who, by profession, was a wine taster lived to the age of 92 before succumbing to the same trouble (prostatic).

b) The Crude Death Rate was 11.8 per 1,000 population compared with 11.61 in 1959, 11.4 in 1958, 13.6 in 1957 and 12.6 in 1956.

c) The Corrected Death Rate after application of the comparability factor was 9.9 per 1,000 population which compares very favourably with 11.5 per 1,000 for England & Wales. The corrected rate in the preceding year was 9.75.

-- Communicable Diseases --

(1) The number of communicable diseases notified fell from 302 in the preceding year to 75. This decline was due to the fact that it was not a measles "year" in the District. The figures are as follows for the year under review and for the two preceding years:-

	1960	1959	1958
Measles	32	283	52
Whooping Cough	15	-	2
Pneumonia	3	9	1
Tuberculosis, Pulmonary	2	5	10
Tuberculosis, Non-Pulmonary	1	-	2
Jaundice	1	-	2
Meningitis	1	-	1
Scarlet Fever	4	5	-
Polioomyelitis	-	-	-
Puerperal Pyrexia	-	-	1
Dysentery	15	-	-
Typhoid	1	-	-
Totals	75	302	71

(2) Measles - This was evidently the year of quiescence in the normal cycle. There was nothing unusual in the age distribution of the cases.

(3) Whooping Cough - Of the 15 cases notified, the greater number had not been immunised. Protection is now conferred as a routine measure in County Infant Welfare Clinics and by Medical Practitioners, the vaccine being administered in combination with Diphtheria and Tetanus vaccine during the 3rd, 4th and 5th months when the contraction of the disease is likely to be fraught with serious consequences. The number of immunisations carried out during the year was as follows:-

Antigen used	Under 1 year		L - 4		5 - 14		Totals	
	Area	Dist.	Area	Dist.	Area	Dist.	Area	Dist.
"Triple" Dip/Tetanus/Pert.	395 (110)	130 (40)	233 (373)	69 (155)	55 (11)	14 (1)	683 (493)	213 (199)
"Combined" Dip/Pertussis.	1 (-)	- (-)	- (9)	- (1)	- (-)	- (-)	1 (9)	- (1)
Totals	396 (110)	130 (40)	233 (382)	69 (159)	55 (11)	14 (1)	684 (502)	213 (200)

(figures in brackets relate to preceding year).

It will be noted that the main increase in this measure of protection occurred in the under 1 yr. of age group, when the highest degree of protection is required.

(4) Diphtheria - Apart from the protection afforded by routine immunisation in infancy, it is essential that "booster" doses should be administered at prescribed intervals to maintain the protection at high level. A salutary lesson in the risks of apathy and neglect born from the very efficacy of diphtheria immunisation which has caused the disease virtually to disappear during the last ten years or more, has been provided by the outbreak which occurred in Derby and in one of the London Boroughs.

The diphtheria "booster" programme which had been given second priority during the more urgent polio. vaccination programme has been stepped up during the year and indeed both initial (missed) immunisations and "boosters" have been carried out as follows:-

Antigens used	Under 1		1 - 4		5 - 14		15 +		Totals	
	Area	Dist.	Area	Dist.	Area	Dist.	Area	Dist.	Area	Dist.
"Triple" Dip/Pert/Tet.	395 (110)	130 (40)	233 (372)	69 (158)	55 (11)	14 (1)	- (-)	- (-)	683 (493)	213 (199)
Dip/Pertussis	1 (-)	- (-)	- (9)	- (1)	- (-)	- (-)	- (-)	- (2)	1 (9)	- (3)
Dip/Tetanus	2 (-)	- (-)	6 (5)	4 (1)	29 (-)	24 (-)	- (-)	- (-)	37 (25)	28 (1)
Diphtheria (Primary)	- (-)	- (-)	- (1)	- (1)	44 (2)	15 (-)	- (-)	- (-)	44 (3)	14 (1)
Diphtheria (Boosters)	- (-)	- (-)	13 (-)	5 (-)	1815 (305)	674 (-)	- (-)	- (-)	1828 (305)	679 (-)
Totals (figures in brackets relate to preceding year)									2593 (815)	930 (204)

(5) Tetanus - There were no cases of tetanus during the year. The demand for protection by immunisation continued and, apart from the immunisation provided in the combined antigens in early childhood, it will be seen by the following tabulated statement that a considerable number of children and others in the higher age groups sought protection by vaccination with tetanus toxoid.

Antigen used	Under 1		1 - 4		5 - 14		15 +		Totals	
	Area	Dist.	Area	Dist.	Area	Dist.	Area	Dist.	Area	Dist.
Tetanus Toxoid	2 (3)	1 (1)	65 (85)	10 (23)	411 (109)	127 (28)	513 (197)	121 (23)	991 (394)	259 (75)
"Triple" Dip/Pert/Tet.	395 (110)	130 (40)	233 (372)	69 (158)	55 (11)	14 (1)	- (-)	- (-)	683 (493)	213 (199)
Dip/Tet.	2 (-)	- (-)	6 (5)	1 (1)	29 (-)	24 (-)	- (-)	- (-)	37 (5)	25 (1)
Totals	399 (113)	131 (41)	304 (462)	80 (182)	495 (120)	165 (29)	513 (197)	121 (23)	1711 (892)	497 (275)
(figures in brackets relate to the preceding year)										

It is important to note, not only the increase in protection in the adolescent age groups, but the 'build up' in protection in the rising generation provided by the "Triple" vaccination in infancy. This must however, be sustained by "booster" doses every five years. The need for the protected individual to produce evidence of his immunisation in an accident is clearly very necessary. A beginning might well be made for every driving licence holder to be protected against tetanus and for his licence to be stamped accordingly.

(6) Polio myelitis - The District was free from polio myelitis throughout the year.

Immunisation with Salk vaccine was extended in the early part of the year to all persons over 40 years of age (and beyond, where necessary); to persons visiting or residing abroad except Canada and U.S.A; to practising Dental Surgeons, Nurses, Public Health Staff and their families.

By the end of the year 3108 more persons had been fully protected with three doses in the Area, a little over half of whom were done in the District. The total number of persons of all categories protected with three doses in the Area amounted to 10,929, the main increase having been among children of school age whose parents had been reluctant to consent in the first instance. The following tabulated statement shows the number and category of all those immunised in the Area by the end of the year:-

	Immunised with 3 doses.	Immunised with 2 doses.
G.P.s and families	8 (8)	10 (10)
Hospital Staff	- (3)	4 (1)
Ambulance Staff	10 (10)	- (-)
Expectant Mothers	559 (310)	93 (216)
Adolescents (16 - 25)	1658 (1224)	161 (940)
Schoolchildren	6901 (4845)	407 (1435)
Preschool children	1604 (1423)	385 (554)
Adults (26 - 40)	167 (-)	309 (-)
Adults (40 +)	19 (-)	13 (-)
Totals	10929 (7621)	1379 (3159)

Firemen and Public Health Staff were included among the adults.

Even allowing for the changing character of the school population, it is clear that a very high percentage of the school population is protected, particularly so when it is realised that immunisation is being carried out as a routine measure in infancy. In future therefore all school entrants should be immunised and the number of children immunised at school will inevitably fall.

(7) Typhoid - The most interesting feature of this solitary and unusual case of typhoid was the patient's admission that he had eaten raw cockles which are usually eaten cooked. Cockles, like oysters, are filterers in their mode of feeding and are therefore liable to pollution in the presence of sewage. The patient was the only member of his family who ate raw cockles and none of his associates ever did.

As was to be expected, samples of cockles taken from the same locality proved negative to organisms of the enteric group, but it is obvious that shellfish taken from waters into which sewage effluents in large volume are discharged, must necessarily be regarded as potentially dangerous however intermittent the infection may be, and should always be eaten cooked unless otherwise purified.

The case, a boy of 16 from Snettisham, was notified in July and was admitted to the Hardwicke Hospital on 4th July, originally as a surgical case, complaining of acute abdominal pain. Laboratory investigations led to the discovery that he was harbouring Salmonella typhi VI (Phage Type 46), a type stated to be of recent importation from Spain. Agglutination reactions showed Salmonella typhi present in 1/80 dilution on 6th July. The same organism was isolated from blood culture on 9th July. The patient finally recovered after a relapse which necessitated his re-admission to Hospital.

Investigations carried out among the members of his family and his associates were negative and so were those carried out on other possible sources of infection. No further cases occurred.

(8) Dysentery - An outbreak of dysentery occurred during January and February. The causal organism was Shigella sonnei. Seven cases were notified in January and eight in February but there is reason to believe that there were several more cases. A few of the cases occurred among members of the same family; others seemed to be entirely unconnected. Ages varied from young children to adults.

Another case contracted dysentery while on holiday in Glamorgan in September. This was a case of Shigella flexner and was reported by the M.O.H. of Cowbridge, Glamorgan. No other cases occurred and members of the same family were free of infection.

(9) Tuberculosis - Three new cases were notified in the District, two pulmonary and one non-pulmonary. All three were females. The two pulmonary cases were aged 21 and 62; one from Rudham, the other from Sedgford (a relapse case). The non-pulmonary case (T.B. glands in the neck) was a young woman of 20 from Snettisham.

As tuberculin Skin Tests carried out among school children in the District during the last three years have consistently revealed a relatively higher percentage of tuberculin positive reactors in the south western part of the District than in any other part of the whole Area, Mass X-ray Survey was considered advisable. By courtesy of the Norwich Mass Radiography Unit, arrangements were made for a visit of the Unit to Dersingham, Heacham and Docking. Despite the most intense publicity by every means and the very generous assistance given by Parish Council authorities, Voluntary Societies, Doctors & Nurses, press and loud-speaker, scarcely 10% of the adult population took advantage of the facilities offered. In all 910 persons (446 males; 464 females) were X-rayed. Of these 2 cases required Chest Clinic observation. This disappointing attendance is undoubtedly due to the inability of the existing Unit to visit every Parish and to the poor transport facilities in the Area.

The B.C.G. Vaccination Programme - The figures of B.C.G. vaccinations carried out in the District in 1960 are as follows:-

SCHOOL	No. due	Accepted	Tested	Read	Pos.	Neg.	Tbn.Index %
Burnham Market	32	31	29	29	6	23	20.6
Hunstanton S.M.	180	133	119	113	17	96	15.0
Dersingham S.M.	75	53	52	49	12	37	24.5
Totals	290	217	200	191	35	156	17.7

It will be noted that the overall acceptance rate for the schools in the District was 74.8% which may be considered fairly satisfactory but which is still capable of improvement.

The Tuberculin Index which gives an indication of the degree of infectivity in the District was 17.7% which is an improvement on the findings in previous year i.e. 31.6% in 1959, 45.8% in 1958 and 44.0% in 1957.

It is hoped to stimulate a greater response for this relatively new, but important, measure of protection which confers an 83% degree of protection over a period of five years, that is to say at a time when adolescents leaving school and going into the world are exposed to the greatest risk of infection.

The Tuberculosis Register for the District by the end of the year showed very little change as shown below. Three of the cases of pulmonary tuberculosis were "transfers" into the District. Thus:-

PULMONARY		NON-PULMONARY	
Male	Female	Male	Female
33(32)	21(20)	3(3)	5(6)
54(55)		8(9)	

(10) Anthrax -- Under the authority of the Public Health (Infectious Diseases) Amendment Regulations, the Minister of Health made Anthrax compulsorily notifiable as from 1st December, 1960. This measure is in addition to the provisions under the Factories Act 1937 which require the notification to the Chief Inspector of Factories of cases contracted in a factory.

(11) Smallpox & Chickenpox. - 20 cases of chickenpox were reported by the School Authorities in different parts of the District in the first half of the year. The risk that, in these days of fast travel, a case of smallpox might be mistaken for one of chickenpox, led to a recommendation being made that chickenpox should be made notifiable, but this was not accepted.

Meanwhile, every effort is made to induce parents to have their children protected against smallpox by vaccination in infancy. The number of vaccinations carried out during the year was as follows:-

		Under 1 yr.	1 yr	2 - 4	5 - 14	15+	Totals
Primary	Area	262(301)	32(40)	31(27)	32(15)	51(34)	408(417)
	District	123(122)	5(10)	7(6)	10(7)	10(17)	155(162)
Re-Vacc.	Area	-	-(1)	8(10)	10(17)	77(63)	95(91)
	District	--	-	1(5)	4(3)	19(17)	24(25)
				Totals		Area	508(508)
						District	179(187)

- Environmental Hygiene -

Mr. Jenkins, the Senior Public Health Inspector in his contribution to this Public Health Report (Part II) has dealt in detail with the many essential services provided by the Council, with housing, with the progress of important new legislative concerning slaughter houses and caravan sites and with other matters such as food inspection.

On housing, the situation is not as satisfactory as it might be. There are still seven Parishes to be surveyed for Slum Clearance. There are 167 applicants on the housing list. Of these 21 are applicants from outside the District and 54 are applicants in need of better accommodation. A more vigorous effort is needed to ensure that sub-standard dwellings are disposed of and that genuine demands for good housing accommodation are met. It may be argued that in a District with a death rate well below that of the whole of England & Wales this is not a matter of urgency. But it should be borne in mind that mortality statistics, although of very great value, give no indication of the degree of morbidity, both physical and mental, which arises from overcrowded, cramped, ill-serviced and damp dwellings and to the unhappiness and distress which these conditions give rise to.

On the other hand it will be noted that there has been an appreciable increase in the number of houses improved by housing grants(~~93~~ as against ~~93~~ in 1959). Clearly this is a most successful and excellent measure but its application is limited and it cannot be regarded as a substitute to a vigorous slum clearance programme.

Slaughter houses and meat inspection - A very considerable amount of work has had to be done by the Public Health Inspectorate on the preliminaries for the enforcement of the new Act, the provisions of which will in due course improve the general standard of slaughter houses. Meanwhile, the percentage of meat inspected has been kept up at a high level and there has been a satisfactory decrease in the proportion of cattle found affected by disease.

Public Cleansing - The addition of two Parishes (Dersingham and Ingoldisthorpe) to the pail emptying service scheme is a welcome feature but it should be noted that there are still 13 Parishes in the District, nearly half the total number, which are still unprovided with any service and that the sooner this unsatisfactory situation can be remedied the better from the public health point of view.

There has been a most welcome improvement in the cesspool emptying services given to the public (2718 services as against 1368) and I feel sure that the best possible use is being made of the equipment and staff provided for this purpose. The ideal solution of course is the provision of sewage disposal schemes and the progress being made in this direction augurs well for the future. The Council would be well advised to restrict any new construction of cesspools in the District and to allow them, if at all, only in places where no waterborne sewage disposal scheme is available.

Refuse collection services have been well maintained but the minimum standard aimed at of weekly collections could not be achieved. The Council would be well advised to consider the possibility of making further provisions to ensure its attainment in the interests of the public health.

The closure of the refuse dump at Syderstone, which has been the cause of endless and very justifiable complaints, has been one of the important achievements of the year under review.

Sewerage - Progress which is being made on the important disposal plants designed to service Burnham Market and Snettisham, Dersingham and Ingoldisthorpe is good. It is most unfortunate that the very expensive sewage disposal plant at Heacham is not yet producing a satisfactory effluent.

Water Supplies -

The report of the Waterworks Superintendent (Mr. J.R. Drysdale) is in Part III (p.24 to 28). It will be noted that the consumption of water has risen since last year by 8,638,000 gallons and that the daily average has increased from 470,917 gallons to 494,583 gallons. With the extension of water-borne sanitation as planned, water consumption will inevitably rise. The standard of the quality of the water supplied has been excellent throughout the year.

APPENDIX A.-- CLIMATIC DATA --

	Mean Daily Maximum Temp.	Mean Daily Minimum Temp.	Mean Daily Temp.	Total Rainfall (inches)	Mean Relative Humidity
January	41.3 (38.0)	34.6 (29.8)	38.2 (33.9)	3.93 (3.33)	92.22 (91.25)
February	43.0 (43.9)	34.0 (34.3)	38.5 (39.1)	1.60 (0.26)	88.0 (89.5)
March	46.4 (50.6)	37.6 (38.4)	42.0 (44.5)	1.01 (1.22)	87.5 (85.75)
April	53.4 (55.7)	41.2 (42.1)	47.3 (48.9)	0.88 (1.64)	80.2 (78. 5)
May	62.0 (59.8)	46.3 (44.7)	54.1 (52.3)	0.53 (0.93)	77.0 (77.0)
June	68.9 (68.2)	50.2 (49.5)	59.5 (58.9)	1.00 (1.01)	76.25 (70.75)
July	66.7 (72.6)	51.6 (53.9)	59.1 (63.3)	2.82 (3.16)	86.75 (74.75)
August	67.0 (71.5)	50.9 (55.3)	58.9 (63.4)	2.84 (1.39)	80.5 (77.25)
September	61.9 (68.2)	49.5 (49.7)	55.7 (58.9)	3.45 (0.09)	85.00 (76.75)
October	55.9 (63.1)	45.5 (46.0)	50.7 (54.5)	4.09 (2.33)	90.0 (83.5)
November	49.2 (48.5)	40.4 (38.6)	44.8 (43.5)	3.83 (1.79)	91.0 (90.5)
December	42.4 (45.4)	35.6 (38.6)	39.0 (42.0)	4.26 (4.25)	91.0 (92.5)

- APPENDIX B. -

- CAUSES OF DEATHS -

Causes of Death	Males	Females	Totals
1. Tuberculosis, respiratory	- (-)	- (1)	- (1)
2. " other	- (-)	- (-)	- (-)
3. Other infective diseases	- (-)	2 (-)	2 (-)
4. Cancer - stomach	5 (7)	4 (-)	9 (7)
5. " - lungs & bronchi	3 (2)	1 (1)	4 (3)
6. " - breast	- (-)	3 (8)	3 (8)
7. " - uterus	- (-)	2 (1)	2 (1)
8. " - other forms	12 (8)	8 (14)	20 (22)
9. Leukaemia	1 (1)	2 (-)	3 (1)
10. Diabetes	1 (1)	- (5)	1 (6)
11. Vascular lesions, nervous system	16 (13)	25 (13)	41 (26)
12. Coronary disease of heart	16 (18)	15 (16)	31 (34)
13. Hypertension	1 (-)	1 (2)	2 (2)
14. Other diseases of the heart.	16 (10)	7 (16)	23 (26)
15. Other diseases of the circulation	3 (5)	8 (11)	11 (16)
16. Influenza	- (-)	- (5)	- (5)
17. Pneumonia	5 (5)	6 (8)	11 (13)
18. Bronchitis	4 (4)	3 (4)	7 (8)
19. Other respiratory disease	1 (-)	3 (-)	4 (-)
20. Ulcers, stomach & duodenum	1 (-)	- (-)	1 (-)
21. Gastritis & diarrhoea	- (-)	1 (-)	1 (-)
22. Nephritis & nephrosis	2 (2)	1 (1)	3 (3)
23. Prostatic enlargement	3 (2)	- (-)	3 (2)
24. Pregnancy & childbirth	- (-)	1 (-)	1 (-)
25. Congenital malformations	1 (1)	1 (-)	2 (1)
26. Other diseases	14 (5)	14 (14)	28 (19)
27. Motor (road) accidents	2 (4)	1 (-)	3 (4)
28. All other accidents	2 (1)	2 (5)	4 (6)
29. Suicide	3 (1)	- (-)	3 (1)
Totals	112 (90)	111 (125)	223 (215)

- APPENDIX C -

Report of Bacteriological Examination of samples of water taken during year.

Parish	Public Supply		Private Sources	
	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory
Birchan	7	-	-	-
Burnham Sutton	5	-	2	-
Creake, North	1	-	-	-
Creake, South	-	-	-	1
Docking	6	-	-	-
Fring	14	1	-	-
Heachan	15	9 ^x	-	-
Holme	-	-	1	-
Houghton	12	-	-	-
Ringstead	1	7 ^x	1	-
Rudham, East	-	-	-	-
Sedgeford	7	-	2	-
Thornham	-	-	-	2
Totals	63	17	6	3

x Note: These were samples taken from washings after the laying down of the new Heachan - Ringstead main.

APPENDIX D.Factories Acts 1937-59.

Annual Report for 1960 under Section 128(3) of the Factories Act, 1937.

Part I

1. Inspections for the purpose of provisions as to health (including inspections made by Public Health Inspectors)

Premises (1)	Number on Register (2)	Number of		
		Inspections (3)	Written notices (4)	Occupiers prosecuted (5)
(i) Factories in which § 1,2,3, 4 & 6 are to be enforced by Local Authorities.	18	14	1	-
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	59	26	4	-
(iii) Other premises in which § 7 is enforced by the Local Authority (excluding out- workers) premises.)	N/A	-	-	-

2. Cases in which DEFECTS were found:-

Particulars (1)	Number of cases in which defects were found				Number of cases in which prosecutions were instituted. (6)
	Found (2)	Remedied (3)	To H.M. Inspector (4)	By H.M. Inspector (5)	
Want of cleanliness (S.1)	2	2	-	-	-
Overcrowding (S.2)	-	-	-	-	-
Unreasonable temperature (S.3)	-	-	-	-	-
Inadequate ventilation (S.4)	-	-	-	-	-
Ineffective drainage of floors (S.6)	-	-	-	-	-
Sanitary Conveniences (S.7)	1	1	-	-	-
(a) Insufficient					
(b) Unsuitable or defective	3	2	-	-	-
(c) Not separate for sexes	-	-	-	-	-
Other offences against the Act.	-	-	-	-	-
Total	6	5	-	-	-

Part VIII of the Act.

Outworkers - Nil

P A R T II

THE REPORT OF

MR. W.B. JENKINS, SENIOR PUBLIC HEALTH

INSPECTOR.

DOCKING RURAL DISTRICT COUNCIL.

1. Inspections & Visits -

The numbers of inspections and visits made in connection with the various branches of public health during the year are as follows:-

Inspections coming within the purview of the Public Health Act, 1936, for the abatement of nuisances, in connection with water supplies, drainage work, building byelaws, etc.....	343
Housing Repairs, Slum Clearance, Disrepair Certificates, etc.....	315
Discretionary & Standard Grants	370
Administration of Public Cleansing Schemes	1107
Food Hygiene Regulations; Food Inspection, including Ice-cream premises	118
Shops Act Requirements	31
Factories' Act	40
Control of Moveable Dwellings	129
Pests Act, 1949	24
Supervision of Public Conveniences	66
Milk & Dairies Regulations	7
Infectious Diseases & Collection of Faeces specimens etc.....	51
Disinfection of houses	1
Water Samples taken ...	9
Food Poisoning Visits	2
Food Poisoning Sample	1
Visits to Slaughterhouses & Butchers' Shops for Meat Inspection ...	1875

2. Notices -

(a) Preliminary. The following preliminary notices were served, requiring the provision of the various Acts and Regulations to be complied with:-

Housing Act, 1957	11
Public Health Act 1936	17
Food Hygiene Regulations	8
Factories Act 1937	2
Prevention of Damage by Pests Act, 1949.	1

(b) Statutory. It was not necessary for the Council to serve any Statutory Notices during the year.

4. Housing -

(a) Slum Clearance - The preliminary survey of houses for slum clearance was continued to a limited extent and by the end of the year the survey of the district had been completed, with the exception of the following parishes:- Anner, Blitham, Choseley, Fring, Houghton, Old Hunstanton and Shernbourne.

(b) New Houses - During the year 4 houses were built by the Council, and 112 were erected by private enterprise. At the end of the year there were 225 applicants on the list for Council houses.

(c) Improvement Grants.

Discretionary Grants.

Number of application received	=	19
" " " approved	=	17
" " " refused	=	2
" " houses improved	=	27
" " tenanted houses improved	=	21
" " owner/occupied houses improved	=	6

Standard Grants.

Number of applications received	=	72
" " " approved	=	68
" " " refused	=	2
" " " withdrawn	=	1
" " " in obedience	=	1
" " houses improved	=	68
" " tenanted houses improved	=	36
" " owner/occupied houses improved	=	32

It will be seen that, as a result of both types of grants, 95 houses were improved, and provided with modern amenities.

Although there is much to be done in the District to raise the general standard of housing, there is no doubt that improvement grants are playing a very useful part in this respect.

4. Food Premises -

The numbers of the various types of food premises in the district are as follows:-

Grocers & General Stores	119
Butchers	19
Fish Fryers	8
Restaurants & Cafes	19
Licensed Premises ...	65
Licensed Slaughterhouses	11
School Canteens	17
Poultry Pluckers .	3
Packhouses	15

The number of food premises requiring registration under Section 16 of the Food & Drugs Act, 1955, and the number of dairies registered under Milk & Dairies Regulations, are as follows:-

Ice-Cream Premises	87
Meat Preserving Premises	19
Dairies	10

5. Food Hygiene Regulations, 1955.

Routine visits to food premises were made throughout the year, and 113 inspections were made for this purpose, under these Regulations.

The Regulations deal with requirements regarding cleanliness of equipment in food premises; the cleanliness of the premises themselves, and their structural condition; the precautions to be taken by persons handling food; and facilities for handwashing and for washing food and equipment.

A number of contraventions of the Regulations were found, and dealt with informally with the occupiers of the premises concerned. This action achieved the desired result, and in no instance was it necessary for any formal action to be taken by the Council.

The Council took successful legal proceedings against a bakery firm situated outside their district, under the Food & Drugs Act, 1955.

Unfit Foodstuffs.

Tradespeople, from time to time, notify the Health Department that quantities of foodstuffs need inspecting before they can be offered for sale to the public. As a result of these inspection, the following food was found to be unfit for human consumption:-

10 tins of canned meat.
5 tins of canned fruit.

3 tins of canned fish.
96 lbs. of cooked meat.

Ice-Cream.

Six samples of ice-cream were taken from retailers for bacteriological examination for cleanliness. The samples were of well-known proprietary brands, and all were reported as being Grade 1 which is satisfactory.

6. Meat Inspection.

This service was carried out regularly throughout the year at the eleven licensed slaughterhouses in the District.

As in past years, this work took up a considerable amount of the Inspectors' time, and 1875 visits to slaughters were made for this purpose.

There were 35 licensed slaughtermen engaged in slaughtering work in the Council's District.

Details of the carcasses inspected and condemned are shown in tabular form below:-

Carcasses Inspected and Condemned				
	Cattle	Calves	Sheep	Pigs
Number Killed	1174	35	1529	3277
Number Inspected	1161	30	1406	3237
<u>All Diseases except Tuberculosis</u>				
Whole carcass Condemned	2	2	2	5
Carcasses of which some part was condemned	184	6	8	144
Percentage of the number inspected affected with disease other than Tuberculosis	16.02	26.66	0.71	4.60
<u>Tuberculosis Only</u>				
Whole Carcasses Condemned	Nil	Nil	Nil	Nil
Carcasses of which some part was Condemned	3	Nil	Nil	105
Percentage of the number inspected affected with T.B.	0.25	Nil	Nil	3.24
C. Bovis. Carcasses affected	9	-	-	-
Percentage of Animals killed which were inspected.	98.89	85.71	91.904	98.7

6. Slaughterhouses Act, 1958. Slaughterhouses Report.

Under this Act, the Council were required to review the existing and probable future requirements of their district for slaughtering facilities and the slaughterhouse facilities which were available, or were likely to become available to meet those requirements, and to report on the position to the Minister of Agriculture, Fisheries & Food, before 2nd November, 1960. This report was prepared and submitted to the Minister by the required date, and by the end of the year no observations on the report had been received from the Ministry.

7. Public Cleansing.

a) Lavatory Pail Emptying - This service was continued in the following parishes:- Heacham (parts only), Snettisham, Sedgeford, Ringstead, Docking, Burnham Market, Burnham Overby, South Creak, Syderstone, East & West Rudham. During the year, Dersingham and Ingoldisthorpe were also brought into the scheme. Where the Council does not undertake this service, nightsoil disposal is the responsibility of the householder.

The normal frequency of pail emptying is once a week, but in exceptional circumstances, two emptyings a week were given.

b) Cesspool Emptying - Cesspool emptying was carried out in all parishes in the district, 4 free emptyings a year being given where necessary, and any emptyings in excess of this being charged for at the rate of 15/- a load.

A summary of the work carried out in this connection is shown below, with the comparative figures for the two previous years:-

	1960	1959	1958
No. of emptyings given - Private Dwellings -	2193	1435	1446
Council houses -	525	433	387
	<hr/>	<hr/>	<hr/>
Totals	2718	1868	1833

The work of pail and cesspool emptying is carried out by 8 men and 4 vehicles, one of these vehicles being used for pail emptying only.

The disposal of pail and cesspool contents presented the usual problem, and the only available means of disposal open to the Council, was by using refuse tips for this purpose.

The estimated annual cost of cesspool and lavatory pail emptying, as allowed for in the 1960/61 estimates, was £6,270. 0. 0d.

c) Refuse Collection - The service providing for the collection of house refuse was maintained throughout the year.

As for the previous year, Heacham, Snettisham and Ringstead were given weekly collections, the other parishes in the district receiving a service approximately every 12 to 13 days. There were occasions, owing to public holidays and shortage of staff, when the frequency of collections went beyond the 12 to 13 days period.

Caravan sites and beach properties in Heacham and Snettisham, were given a weekly service during the summer months.

The method of collection remained the same, i.e. the bins were emptied from the position at which they were placed by the householder, and people were not expected to put their bins outside, or even at the boundary of their property. This "back-door" system of collection, although perhaps not conducive to a speedy collection service, is, I believe, the method that is appreciated by the public. Final disposal of refuse is by crude tipping in the 13 refuse pits in the district. This might not be the ideal method of refuse disposal, but most of the tips are situated well away from houses, and no danger to public health appears to have been caused by their existence. This form of disposal is certainly the most economical than can be employed. Two of the pits are now shared by neighbouring Authorities for refuse disposal.

Four machines and twelve men are engaged on refuse collection, with another vehicle and two men employed part-time on refuse and pail work. The cost of refuse collection, as allowed for in the 1960/61 estimates, was £11,935.

d) Salvage - A limited amount of salvage work was carried out by the refuse collectors, the materials recovered being metals, rags and bones. As there was no demand for paper or cardboard, no attempt was made to collect it. The material salvaged was sold by the Council, half the value being paid to the collectors as a salvage bonus.

The value of the materials collected during the year was £125. 11. 5d.

A quantity of worn-out hose pipe couplings etc., were sold, having a value of £5.11.0d., this amount being credited to the Council.

8. Sewerage.

The main feature in connection with sewerage was the survey of Burnham Market for the provision of a sewerage scheme for that village. The survey and preparation of the scheme, was carried out by the staff of the County Council Public Health Department.

A report was prepared and submitted to the Council on the relative need of Snettisham and Dersingham for sewerage schemes. As a result of this report, the Council decided that first priority should be given to Snettisham, and the County Public Health Engineer was required to commence a survey of that parish, and at the same time to consider the practicability of a combined scheme for inclusion of Ingoldisthorpe and Dersingham.

9. Caravan Sites and Control of Development Act, 1960.

This Act came into force at the end of August and introduced completely new legislation for the control of caravans.

One of the most important provisions of the Act was that giving Local Authorities power to make conditions for attaching to licences for caravan sites.

The Council gave thorough consideration to the formulation of conditions, bearing in mind the model standards laid down by the Ministry of Housing and Local Government, and finally agreed on a set of conditions which were considered to be reasonable, and which should result in the improvement of many of the caravan sites in the district.

A survey of the number of caravans and tents in the district was carried out during August, which revealed that on 34 sites, there were 1,211 caravans and 140 tents in use.

10. Water Supplies -

a) Public Supply. Water from the Council's supply is available to almost all properties in the district. However, despite the fact that mains water has been distributed over the whole area, this does not necessarily mean that water is readily available for all householders. There are too many instances where water has to be carried a considerable distance, from taps or standpipes; and perhaps some time in the future, the Council may consider, in appropriate cases, ways means of making this essential commodity easier.

Sampling, for bacteriological analysis was carried out by the staffs of the Public Health and Water Departments. During the year 80 samples were taken (See Appendix C page 15).

b) Private Supplies. 9 samples of water were taken from wells serving private houses, and 3 of these were reported on as being unsatisfactory. Informal action was taken with the owners of the properties concerned and, as a result, mains water was made available to the occupants of 7 houses.

11. Rodent Control.

During the year, 327 applications were received to deal with premises infested with rats or mice. These applications were dealt with and the work of treatment involved the inspection of 868 properties, of which 513 were found to be in need of treatment. In addition, the Council's 13 refuse tips were also given regular attention.

12. Infectious Diseases -

36 visits were made in connection with infectious diseases. Most of these were to do with a case of typhoid fever at Snettisham, which included the interviewing of contacts etc.

33 visits were also made for the collection and dispatch of samples of faeces and cockles.

One disinfection was carried out after tuberculosis.

13. Dirty & Verminous Premises -

11 visits were made to deal with 3 premises reported as being verminous.

14. Milk & Dairies -

There are 11 registered dairies in the district, and 28 licences were issued to dairymen and occupiers of shops selling bottled milk, authorising the sale of milk under special designation. 5 supplementary licences were issued to dairymen outside the district to retail milk within the Council's area.

15. Factories & Workshops -

There are 78 factories and workshops in the district coming within the purview of the Factories Act.

40 inspections were made during the year and 6 contraventions of the Act were found. These were in connection with lack of cleanliness and with the provision of sanitary conveniences, and they were remedied by the service of informal notices.

W.B. JENKINS, C.S.I.B., C.R.S.I.,

Senior Public Health Inspector.

P A R T I I I

THE REPORT OF

MR. J.R. DRYSDALE

WATERWORKS SUPERINTENDENT

DOCKING RURAL DISTRICT COUNCIL.

WATER CONSUMPTION.

<u>Source</u>	<u>Total Quantity Consumed & Purchased.</u>	<u>Average Daily quantity</u>
Great Birchan Boreholes	103,730,000	284,191
Fring Boreholes	38,918,000	106,625
Heacham, Bulk Supply	27,745,000)	102,523
" from Great Birchan	9,676,000)	
Houghton	454,000	1,244
Total	180,523,000	494,583

It will be noted that the bulk supply to Heacham was for part of the year only, as in the latter part of the year Heacham was supplied from the District Scheme.

The above consumption figures are nett for each District.

Pumping Costs.

<u>Station</u>	<u>Units consumed</u>	<u>Total Costs</u>	<u>Cost per Thousand Gallons.</u>
Great Birchan	207,819	£919. 7. 7.	1.064
Fring, including Booster	63,452	£311. 16. 1.	1.92

Bulk Supply Purchases

Heacham	£924. 16. 8.
Houghton	£32. 1. 0.

Bulk Supply given.

To Walsingham 298,000 gallons

Storage

Reservoir, The Mount, Docking	400,000 gallons
Water Tower, The Mount, Docking	225,000 "
Reservoir, Innere	300,000 "
Water Tower, Heacham	50,000 "

Total 975,000

PUMPING STATIONS.(a) Great Birchan.

The quantity of water pumped from this Station has increased by some 13,602,000 gallons over the 1959 figures, this is partly accounted for by supplying Heacham from this source for part of the year.

The pumping plant and auxiliaries at this Station operated satisfactorily throughout the year with only normal maintenance, with the exception of the Chlorination plant.

The stand-by diesel generator has been operated on a number of occasions.

The recorded borehole levels at this Station were as follows:-

October 1958 October 1959 October 1960

Rest Levels	16'3"	24'	22'6"
Pumping Levels	26'6"	45'	46'

(b) Fring.

There was a slight decrease in the quantity pumped from this Station compared with 1959. The plant and auxiliaries operated satisfactory with only normal maintenance required.

The recorded borehole levels at this Station are as follows:-

	<u>October 1958</u>	<u>October 1959</u>	<u>October 1960</u>
Rest Levels	11'	18'6"	18'
Pumping Levels	16'	24'	24'

SAMPLES

In conjunction with the Public Health Department the following samples from the Public Supply have been submitted for analysis to ensure wholesome supply:-

District Scheme and Ringstead -	
Heacham Main	32
Dersingham Scheme	21
Bulk from Freebridge - Houghton	12
Bulk from Hunstanton - Heacham	<u>15</u>
	<u>80</u>

Of the above samples there were 17 unsatisfactory. 1 from a standpipe in Fring and 16 from the Ringstead - Heacham new main.

DISTRIBUTION.

Mains water is available to all Parishes of the Rural District, new supplies continue to be carried out to old as well as new properties.

Once again trouble developed in Heacham when Hunstanton could not supply sufficient water to meet demands and storage, this necessitated utilising the by-pass on quite a number of occasions, which caused a depleted supply to some of the higher lying areas.

The new link main from Ringstead to Heacham Tower has been completed, sterilised and turned into service, this ought to considerably reduce any inconvenience that Heacham consumers have had to put up with in the past.

FLOW TESTS.

Minimum flow tests were carried out periodically throughout the District to minimise waste, also, to keep electricity costs as low as possible.

MAINS AND MAINS FITTINGS.

All mains and mains fittings are inspected regularly to enable maintenance and repair costs to be kept to a minimum.

A considerable number of mains fittings were overhauled and/or renewed in Heacham for the National Fire Service.

NEW SUPPLIES

New supplies connected during the year are as follows:-

	<u>Domestic</u>	<u>Metered</u>	<u>Special Charges</u>	<u>Total</u>
District Scheme	52	18	3	73
Dersingham and Heacham	68	14	3	85
	<u>120</u>	<u>32</u>	<u>6</u>	<u>158</u>

MAINS EXTENSIONS AND COMMUNICATION PIPES.

Mains extensions and communication pipes exceeding £50 in cost have been carried out as follows, the cost has been borne as indicated:-

Thornham

Off Main Road, New Estate, Mr. J. Botts - Developer

Heacham

Jubilee Road, New Caravan Site, Mr. Simpson - "
Jubilee Road, New Caravan Site, Mr. Plumb - "

Docking

Docking Old Tower. By-pass - Docking R.D.C.

Holne

"Wayside" Main Road, Holne, Mrs. Pratt - Owner

Heacham

Regent Garage, Lynn Road, Regent Oil Co. Ltd. - "

Shettisham

Common Road, Shettisham. Mr. Markham - "

North Creake

Shammar Road, Viscount Althorp. - "

MAINS AND SERVICES - REPAIRS AND MAINTENANCE.

Normal maintenance of mains and services have been carried out, repairs or renewals have been completed with as little inconvenience as possible to consumers.

A 4" mains fracture occurred in Thornham and was dealt with the same day.

RESERVOIRS AND WATER TOWERS.

Only normal maintenance has been necessary on the reservoirs and Water Towers, with the exception of Docking Old Tower which the Council decided to have demolished, this demolition being carried out after a by-pass main was installed.

METERS

There are now some 502 meters throughout the District which the Council are responsible for. In the year ended 31st December, 1960, some 142 meters were changed, tested, overhauled and returned to service, this work is carried out by the Water Department Staff.

VEHICLES, SMALL PLANT AND TOOLS.

All normal maintenance work on both the Water Department Vehicles and small plant is carried out satisfactorily by our own Staff. No major repairs have been necessary, only spares which were renewed by the Staff.

GENERAL.

Regrouping of Undertakings. Further meetings of the authorities concerned have taken place but nothing conclusive has been reached.

To conclude my report I would like to acknowledge the assistance rendered to me by the Chairman and Members of the Public Health Committee, the Clerk and other Officers of the Council, also members of the Water Department Staff, who have all assisted in maintaining an efficient service throughout another busy year.

I am,

Ladies and Gentlemen,

Your Obedient Servant,

J.R. Drysdale

Waterworks Superintendent.

Staff.

J.R. Drysdale.
J. Newman
W.H.C. Brain
R.S. Delf

Waterworks Superintendent.
Assistant Waterworks Superintendent.
Administrative Assistant.
Waste Inspector.

